

Appl. No. 09/687,335
Amdt. Dated October 7, 2003
Reply to Office Action of July 7, 2003

REMARKS

The non-final Office Action mailed July 7, 2003 has been fully considered. Claims 1, 2, 24, 32 and 35 have been amended. Claims 1-38 are pending in the application.

Applicants appreciate the indication of allowability of Claims 5, 7-22, 25, 28, 30, 33, 36 and 38 in paragraph 23 on page 6 of the Office Action.

On page 2 of the Office Action, claims 1, 2 and 35 were objected to because of certain informalities.

Applicants respectfully traverse the objection. Nevertheless, Applicants have amended claim 1, 2 and 35 in accordance with Examiner's suggestions. Applicants have also amended claims 24 and 32 to further clarify the claims' punctuation. Applicants submit that the amendments to the claims do not expand or change the scope of the present invention.

In paragraph 5 on page 2 of the Office Action, claims 1 and 2 were rejected under 35 U.S.C. § 102(b) over Marks, et al., (U.S. Patent No. 5,790,775).

Applicants respectfully traverse the rejection. Applicants respectfully submit that the cited Marks reference fails to teach all elements of Applicants' claim. For example, Claim 1 is a method that includes "mapping open options of the operating system to SCSI persistent reserve commands to allow all of the multiple paths to register with the logical unit number of the shared storage system." This enables use of the shared storage system via an alternate input/output path upon a hardware failure of a first of multiple input/output paths.

In contrast, Marks is directed to fault tolerant storage controllers operating in the SCSI environment. See Column 1, lines 8-9. Marks does not disclose, teach or suggest at least "mapping open options of the operation system to SCSI persistent reserve commands" as the Office Action asserts. Rather, Marks teaches a type of "physical storage media 32, which is comprised of SCSI I/O devices 34, is interconnected to each controller 14 on the device side SCSI bus 26." See Column 5, lines 6-8. Nowhere in this cited portion of Marks or in any other portion of Marks is "mapping open options of the operation system to SCSI persistent reserve commands" taught. In fact, Marks never mentions mapping or persistent reserve commands.

Without complete correspondence to the claimed invention, the Section 102 rejection cannot stand and Applicants request that the rejection be withdrawn. Therefore, Applicants respectfully submit that claims 1 and 2 are patentable over Marks et al.

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In paragraph 7 on page 3 of the Office Action, claims 23, 24, 26-27, 29, 31, 32, 34-35, and 37 were rejected under 35 U.S.C. § 102(a) over IBM's SCSI Command Reference manual (ISCRM).

Applicants respectfully traverse the rejection. Applicants respectfully submit that the cited Marks reference fails to teach all elements of Applicants' claim. For example, Claim 23 requires at least "processing reservation keys to identify registered hosts; and processing persistent reservation commands to control access by a host."

The ISCRM, on the other hand, explains that "[a] key part of persistent reserve is an eight byte key registered by an initiator," and from this statement the Office Action erroneously states that "processing reservation keys to identify registered hosts" from the present invention is taught. The ISCRM does not teach processing reservation keys. Rather the ISCRM at page 22, lines 1-4 characterizes what a persistent reserve key is. However, ISCRM does not suggest what operations concerning reservation keys are performed. Thus, ISCRM fails to disclose, teach or suggest at least "processing reservation keys to identify registered hosts."

Moreover, the ISCRM does not teach the present invention's "processing persistent reservation commands to control access by a host" as the Office Action asserts. Instead, the ISCRM states "[p]ersistent reservations persist across recovery actions, to provide initiators with more detailed control over reservations recovery." The ISCRM does not disclose, teach or suggest the more detailed aspect of persistent reserve commands being used to control access by a host. Thus, ISCRM fails to disclose, teach or suggest at least "processing persistent reservation commands to control access by a host."

Because the ISCRM does not teach every aspect of the present invention the Section 102 rejection is inappropriate and should be withdrawn.

Dependent claims 2-22, 24-38 are also patentable over the references, because they incorporate all of the limitations of the corresponding independent claims. Further, dependent claims 2-22, 24-38 recite additional novel elements and limitations. Applicants reserve the right to argue independently the patentability of these additional novel aspects. Therefore, Applicants respectfully submit that dependent claims 2-22, 24-38 are patentable over the cited patent.

In paragraph 19 on page 5 of the Office Action, claims 3, 4, and 6 were rejected under 35 U.S.C. § 103(a) over Marks as applied to claim 1, and further in view of IBM's SCSI Command Reference manual (ISCRM).

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To establish a *prima facie* case for rejection under 35 U.S.C. § 103(a), all the claim limitations must be taught or suggested by the prior art. See, MPEP § 2143.01. In this instance, as described below, the requirement is not present and a *prima facie* rejection fails under 35 U.S.C. § 103(a), and thus Applicants respectfully traverse the rejection.

As explained in the Section 102 discussion above, Marks fails to teach, disclose or suggest all the elements of Claim 1. Marks fails to teach the element of "mapping open options of the operating system to SCSI persistent reserve commands to allow all of the multiple paths to register with the logical unit number of the shared storage system" from independent Claim 1.

The ISCRM reference fails to remedy the deficiencies of Marks because the ISCRM also does not teach "mapping open options of the operating system to SCSI persistent reserve commands to allow all of the multiple paths to register with the logical unit number of the shared storage system." The ISCRM reference generally describes persistent reservations management method including when persistent reservations are retained and that persistent reservations and how to reserve a LUN using a persistent reserve but does not discuss how persistent reserve can be used to map open options of an operating system in order to overcome system failure of a multiple path storage system.

Because the combination of Marks and the ISCRM reference fails to teach, disclose or suggest the first element of the first claim the Section 103 rejection is improper.

On the basis of the above amendments and remarks, it is respectfully submitted that the claims are in immediate condition for allowance. Accordingly, reconsideration of this application and its allowance are requested.

If a telephone conference would be helpful in resolving any issues concerning this communication, please contact Attorney for Applicants, David W. Lynch, at 651-686-6633 Ext. 116.

Respectfully submitted,

CRAWFORD MAUNU PLLC
1270 Northland Drive, Suite 390
Saint Paul, MN 55120
(651) 686-6633

By: 

Name: David W. Lynch
Reg. No.: 36,204

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